

ATTORNEY DOCKET NO. PEN 17,603 A
U.S. SERIAL NO. 10/643,245
PATENT

IN THE CLAIMS:

Please amend the claims as follows:

1-8. (Canceled).

9. (Currently Amended) A method of generating a desired image, comprising:
analyzing a first image to determine a desired brightness and a desired contrast for said
first image;

~~first adjusting said first image to said desired contrast to form a second image; and~~
~~second adjusting said second image for said desired brightness to form said desired image~~
providing an illumination beam from a constant intensity light source;

modulating said illumination beam to produce an image beam having said desired
contrast; and

optically adjusting a one of said illumination beam and said image beam to form said
desired image having said desired brightness.

10. (Previously Presented) The method as claimed in claim 9, wherein the analyzing
is performed by a regulator.

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11. (Currently Amended) The method as claimed in claim 9, wherein ~~adjusting said first image to a desired contrast~~ the step of modulating is performed by a light modulator panel.

12. (Currently Amended) The method as claimed in claim 9, wherein ~~adjusting said second image for a desired brightness~~ the step of optically adjusting is performed by a light control device.

13. (Previously Presented) The method as claimed in claim 9, wherein a brightness and a contrast of said desired image are adjusted substantially independently of each other.

14. (Previously Presented) The method as claimed in claim 9, wherein a contrast of said desired image is independent from a background illumination level.

15. (Currently Amended) The method of claim 9, wherein
the first image does not cover a complete range of gray levels producible by an image processing apparatus performing said ~~first adjusting~~ step of modulating;
the ~~second image~~ image beam covers a larger range of gray levels than the first image, while being within said complete range; and
whereby, the desired ~~range~~ image has the larger range of gray levels with the desired brightness.

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16. (Currently Amended) The method of claim 15, wherein the image processing apparatus comprises at least one light modulation panel and wherein the ~~second image~~ image beam comprises image modulation information within the at least one modulation panel.

17. (Currently Amended) The method of claim 15, wherein the first-adjusting step of modulating results in a brightness level that causes the ~~second image~~ image beam to lie within parameters achieving a maximum dynamic range of at least a portion of the image processing apparatus.

18. (Currently Amended) The method of claim 17, wherein the ~~second-adjusting step~~ of optically adjusting relates to a second portion of the image processing apparatus.

19. (Currently Amended) A method for producing an output image in a device comprising a constant intensity light source and at least one light modulator, the output image resulting from passing light from the constant intensity light source through the light modulator, the method comprising:

analyzing an input image to derive a desired contrast and desired brightness;

adjusting the light modulator to a setting which would normally not result in the desired brightness, but would result in the desired contrast;

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optically adjusting light from the light source the brightness of the output image to retain the desired contrast achieved by the light modulator while attaining the desired brightness in the image.

20. (Currently Amended) An image producing device comprising:
- a video input;
 - at least one constant intensity light source, having a given normal brightness value;
 - at least one light modulator, responsive to the video input for adding image data from the video input to light from the light source;
 - means for
 - analyzing the video input to derive a desired contrast and a desired brightness;
 - supplying at least one first control signal to cause the light modulator to be adjusted to achieve the desired contrast, but a brightness other than the desired brightness with the constant intensity light source at the given normal brightness value;
 - supplying at least one second control signal to cause ~~light source to have a new brightness value~~ an optical brightness adjustment in order to achieve the desired brightness in the output image in view of the adjustment of the light modulator; so that the output image has both the desired contrast and the desired brightness.